# **DETAILED SPECIFICATIONS FOR** SAN DIEGO SHERIFF DEPARTMENT SAN DIEGO, CALIFORNIA

0	GENERAL INSTRUCTIONS		
0.01	It is the intent of these specifications to withstand the severe and continuous us		
0.02	The Law Enforcement Vehicle shall be with due consideration to the nature a is required to provide weights of similar	nd distribution of the l	load to be sustained. Bidder
	Vehicle Type		Year
	Body Length		
	Unloaded Weights:		
	Front: Left	Right	
	Rear: Left		
	Total Curb Weight		<u></u>
	Contact Person		
	2. Vehicle Type		Year
	Body Length		
	Unloaded Weights:		
	Front: Left	Right	
	Front: LeftRear: Left	Right	
	Total Curb Weight		
	Owner of Vehicle		
	Contact Person		
	3. Vehicle Type		Year
	Body Length		
	Unloaded Weights:		
	Front: Left	Right	
	Rear: Left		
	Total Curb Weight		
	Owner of Vehicle		
	Contact Person		

- These specifications detail the requirements for general design criteria of engine, transmission, electrical, body, painting, and equipment. In evaluating the bid proposals to determine which proposal is the most advantageous, these major items shall be considered.
  - 1. Conformity to the Specifications.
  - 2. Bidders past performance with this and other agencies.
  - 3. Manufacturers past performance with this and other agencies.
  - 4. Bidders ability to service vehicles for this agency.
  - 5. Cost of vehicles after adjustments for exceptions taken.

COMPLY	YES	NO

Law Enforcement Vehicle and equipment must meet the specific requirements and the intent of the requirements as specified herein. All items of these specifications shall conform to the character of the proposed Law Enforcement Vehicle and the purpose for which it is intended.



- The Law Enforcement Vehicle and equipment to be furnished in meeting these specifications must be the product of an established reputable emergency vehicle QVM certified manufacturer. Each bidder shall furnish satisfactory evidence of the manufacturer's ability to construct, supply service, parts, and provide technical assistance for the vehicle specified. Bidder shall provide name, address, and phone number of the nearest facility which meets the following criteria.
  - 1. Facility is under direct control of bidder to insure prompt service.
  - 2. Facility has the needed equipment, (i.e., press brake, shear, plasma cutter, paint booth, etc.) to fabricate major body parts.
  - 3. Facility has the ability and authority to properly remount module body bid without affecting manufacturer's warranties.
  - 4. Facility is a Ford QVM member.
  - 5. Facility is a member of NTEA (National Truck equipment Association)

Name			
Address		-	
Phone			
	COMPLY	YES	NO

The manufacturer shall defend any and all suits and assume all liability for any claim against the purchaser for the use of any patented process, device, or articles forming any part of the emergency vehicle proposed. Each bidder shall supply proof of \$5,000,000 product liability and facility insurance or show proof of being listed on manufacturer's \$5,000,000 product liability and facility insurance policy.

COMPLY	YES	NO

0.07	The vehicle shall be tested and approved prior to delivery, and all records of same shall be submitted at time of delivery. Bidders shall state the amount of mileage the vehicle will have on it at the time of delivery.
	Approximate mileage at delivery
	COMPLY YES NO
0.08	The manufacturer shall supply one (1) copy of parts, service, and operational manuals delivery of the proposed Law Enforcement Vehicle. Manuals shall include "As Builbody wiring diagrams.
	COMPLY YES NO
0.09	Bidder shall compute pricing less Federal and State taxes. It is understood that an applicable taxes will be added to the proposed prices unless the purchaser furnished appropriate tax exempt forms. The proposal form contained herein shall be used by a bidders.
	COMPLY YES NO
0.10	Bids shall be addressed and submitted in accordance with the "Call For Bid Cove Letter". Bid envelope must be identified with the words "Law Enforcement Vehic Bid", the opening date, and time on the face of the envelope.  COMPLY YES NO
0.11	It is the bidders' responsibility to see that their proposals arrive on time. Late proposal telegrams, fax, e-mail or telephone bids will not be considered.
	COMPLY YES NO
0.12	The bidder shall state the number of calendar days required for delivery of the complete vehicle after receipt of order by the manufacturer.
	COMPLY YES NO
0.13	All bid prices shall be F.O.B. destination on a delivered and accepted basis. If a drive or allowance is allowed, it will be shown on the proposal page as a separate deduct amount complete with details explaining the drive out procedure.
	COMPLY YES NO
0.14	The successful bidder will be responsible for preparing and maintaining a record file of all parts and assemblies used to manufacture the emergency vehicle. These records shat be maintained in the factory of the bidder for the life of the apparatus. File shall contain copies of any and all reported deficiencies, all replacement parts required to maintain the apparatus, and original purchase documents including specifications, contract, invoice incomplete chassis certificates, quality control reports, and final delivery acceptant documents.

COMPLY

YES\_

NO\_

O.15 Due to the technical nature of this project, bidders are required to provide detailed drawings and detailed specifications of exactly what they are proposing. Bids not providing these required support documents shall be deemed non-responsive and rejected.

Drawings shall include four (4) exterior views showing lights, equipment, stripes, lettering, etc. and four (4) interior drawings showing cabinets, benches, equipment placement, etc.

The use of standard drawings and standard specifications or copies of bid drawings does not constitute detailed drawings and detailed specifications and shall not be considered. In order to make evaluations of proposals as quick and concise as possible, manufacturers detailed specifications shall be in the same order as the bid document. Minor details of construction and materials, where not otherwise specified, are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features.

#### NO EXCEPTION.

Some items have been specified by brand name or model number. These have been carefully selected because of their reliability, the availability of parts and service, or uniformity with this department. In order to be responsive, items specified by brand name and or part number named shall be contained in bid proposals.

COMPLY YES\_\_\_ NO\_\_\_\_

Each bidder must indicate compliance with these specifications by checking "Comply Yes / No" below each section of these specifications. Checking "Yes" will indicate complete compliance with that section; "No" will indicate an exception is being taken. Bidder must <u>underline in red ink</u> any portion of the section which will not be provided as specified. All exceptions must be fully explained on a separate page, giving reference to the page number and the section where the exception is being taken. Sufficient explanation and documentation shall be provided so that this agency may evaluate exception. Failure to comply with these requirements will result in automatic rejection of the entire proposal.

COMPLY YES\_\_\_\_ NO\_\_\_\_

**0.18** Proposals taking total exception to specifications will not be accepted.

COMPLY YES\_\_\_ NO\_\_\_

**0.19** The purchaser reserves the right to accept or reject any and all bids on such basis as the purchaser deems to be in its best interest, and is not bound to accept low bid.

COMPLY YES\_\_\_\_ NO\_\_\_\_

**0.20** The purchaser reserves the right, before awarding the bid, to require a bidder to submit evidence of their qualifications as may be deemed necessary.

**0.21** All equipment furnished shall be guaranteed to be new and of current manufacture and to meet all requirements of these specifications. Workmanship shall be of high quality and accomplished in a professional manner so as to ensure a safe and functional apparatus.

COMPLY YES NO
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Manufacturer shall warrant new apparatus of its own manufacture against defective workmanship and materials for a period of at least two years from the date of delivery to the purchaser. A lifetime module body warranty shall be provided. Under this warranty, manufacturer's liability is limited to furnishing purchaser, without cost, parts and labor required to replace defective material or workmanship when there is no indication of misuse, neglect, improper maintenance, accident, or overloading the apparatus. Defects shall be reported to seller in writing by the purchaser within the warranty period. Parts and labor will be supplied after inspection by an authorized agent of the manufacturer. Defective parts shall be returned prepaid by purchaser to seller when requested. Warranty shall begin upon acceptance of the manufactured apparatus by the purchaser. All warranties included with this proposal shall be provided by the respective manufacturer and included with bid proposal.

COMPLY YES NO
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In the event the unit fails to meet the specified requirements, the purchaser has thirty (30) days to notify the contractor in writing of corrections required. Failure to make such changes as the purchaser may consider necessary to conform to any clause of the specifications, within thirty days of notification, shall be cause for rejection of the unit.

COMPLY	YES	NO

All bidders shall provide bid security in the amount of ten percent (10%) of the total bid price, payable by bidder to the purchaser. Such security may be in the form of a bid bond in form and from a surety company reasonably acceptable to purchaser, a cashier's check, or other security acceptable to purchaser. Bonds which do not show the bidder as "principal" shall be rejected as unenforceable and bid deemed non-responsive.

In case of failure or refusal of the successful bidder to enter into a contract, the bid security submitted with the bid may be forfeited as liquidated damages because of such a failure.

COMPLY	YES	NO

O.25 The successful bidder may be required to execute and deliver to the purchaser a Performance Bond in the amount of 100% of the contract price, in form and from a surety company reasonably acceptable to purchaser. The bond shall show the bidder as the "principal" and provide for a 100% guarantee that the bidder will deliver the apparatus and equipment per the bid specifications. The bond shall extend to the warranty provided by the bidder/manufacturer for one (1) year past delivery date, beyond which time the bidder/manufacturer will maintain continued responsibility for the remaining term of the warranties. Bidder shall state cost of such bond on price sheet. Requested bonds will only be acceptable if the bidder is listed as the principal on the bonds. Bonds from manufacturers will not be acceptable unless they are the bidder and will be a party to the contract.

COMPLY	YES	NO

0.26

Bidder shall provide a pre-build meeting and a final inspection meeting at the manufacturing facility. If the bidder is not in the full time employment of the company who will manufacture the vehicle, he is required to attend both of these meetings.

Bidder shall be responsible for the following expenses, to include airfare, ground transportation from airport to plant and return, meals and lodging if necessary.

Pre-build meeting shall be for one person from purchaser. Final Inspection meeting shall before two people from the purchaser.

This bid shall include pre-build meeting for two (2) San Diego Sheriff EOD team members, to include airfare, ground transportation from airport to plant and return, meals and lodging (separate rooms). One (1) mid-build visit with two (2) San Diego Sheriff EOD team members, and final inspection meeting for two (2) San Diego Sheriff EOD team members, and one (1) San Diego Sheriff Fleet Coordinator to include airfare, ground transportation from airport to plant and return, meals and lodging (separate rooms).

COMPLY YES\_\_\_ NO\_\_\_

0.27

As this agency expects to remount this vehicle at some future date bidder shall supply a copy of the manufacturer's current remount warranty with the bid. If the manufacturer does not provide remount services bidder shall provide the name, address, phone, and history of the company who does provide the remount services, a current copy of their remount warranty and \$5,000,000 product liability insurance policy.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 0.28 FORCE MAJEURE

The seller shall not be charged with liquidated damages or any excess cost when delay in delivery of goods is due to:

- 1. Any preference, priority of allocation order duly issued by the Government;
- 2. Unforeseeable cause beyond the control and without the fault, or negligence of the Seller, including but not restricted to, acts of God, or of the public enemy, acts of the Buyer, acts of another Contractor in the performance of a contract with the Buyer, fire, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; and
- 3. Any delays of subcontractors occasioned by any of the causes specified in the two immediately preceding clauses.

Provided that the Seller shall, within seven (7) days from the beginning of such delay, notify the Buyer, in writing, of the causes of the delay whereupon the Buyer shall ascertain the facts and extent of the delay and notify the Seller within a reasonable time of its decision in the matter.

	COMPLY	YES	NO
- 4			

# **INVESTMENT:**

Year	Make	Model	Price	
			Sales Tax	
			Total	
	as: The above vehicle price ne balance due in 30 days.	e shall be based upon a	90% payment being made	upon receipt of
Drive out allow	wance price			
Inspection visi	t allowance			
100% Perform	ance Bond – If required A	DD		_
	Intec VSC2610 High Perfo e Camera – ADD	ormance		
The price quot	ed above shall remain firm	until	<u></u>	
Delivery: Cale	endar days after receipt of	order		
	Bidder			
	Signed			
	Address			
	Phone			
Motor Vehicle	Dealer License: State	#		

# 1 CHASSIS

#### 1.01 OEM CHASSIS

- 2011 International 4400 SBA LP, 4 x 2, chassis
  - Extended cab; Rescue Application
  - Warranty is a twelve (12) month basic "bumper to bumper"
  - Provided by Manufacturer

IPLY YES NO
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#### 1.01.01 SPECIFIC RATINGS

Drive – 4 x 2
 GVW Capacity – 25,999 lbs
 Wheel base – 236"
 Cab to Axle 142.9"
 Ratio 4.63

COMPLY	YES	NO
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# 1.01.02 POWERTRAIN

- Engine MaxxForce 9
  - 330 hp, 950lb-ft. @ 1200 RPM, 2200 RPM governed speed
  - Block Heater, 1,250 watt
  - Engine Brake, combination engine and exhaust, electronically activated
- Transmission
  - Allison 3000EVS P, Automatic, 6-speed with double overdrive
  - With provisions for PTO, less retarder
  - Push-Button Type shift control
  - Engine Control Provisions for Remote Mounted
  - Synthetic Fluid
- Engine Cooling System
  - Aluminum Radiator, 2-Row cross flow over under system
  - Fan Drive two speed direct drive
- Exhaust
  - Exhaust system in accordance with Federal Motor Carrier Safety Regulations, Part 393.83
  - Discharge at the streetside of the vehicle
  - Tailpipe outlet shall not terminate within six (6) inches of the vertical axis of the fuel tank filler openings
  - Emission compliance engine shutdown system exempt. Complies with California Clean air Regulations

COMPLY	YES	NO

#### **1.01.03 STEERING**

- Power Sheppard M-100
- Tilting steering column
- Two-Spoke, 18" steering wheel

COMPLY YES\_\_\_ NO\_\_\_

# 1.01.04 AXLES AND SUSPENSION

- Front Axle 9,000 lb Capacity; I-Beam type
- Front Suspension Parabolic, taper leaf spring, 9,000 lb. Capacity
- Rear Axle 19,000 Capacity, Single Reduction
- Rear Suspension 18,500 lb. Capacity, Ride Optimized, 5.3" ride height
- Front and Rear shock absorbers

COMPLY YES\_\_\_ NO\_\_\_

#### 1.01.05 BRAKING SYSTEM

- Air Dual System; Bendix Antilock Brake system, 4-channel
- Front Air Cam S-Cam; 15.0" x 4.0"; Rear Air Cam 16.5" x 7.0"
- Parking Brake Spring actuated, with control on dash
- Air Dryer with Heater
- Air Compressor 13.2 CFM capacity

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 1.01.06 TIRES AND WHEELS

- Front Tires Two (2) 255/70R, 22.5, 16 ply, G169 Highway tread
- Rear Tires Four (4), 255/70R, 22.5, 16 ply, G622 Highway tread
- Tire Valve Cap Flo-thru design
- Wheels Six (6) 22.5" Polished Aluminum; 10-stud
- Spare tire and wheel to be shipped loose (Section 8.01)

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 1.01.07 ELECTRICAL

- Alternator 320 Amp Leece-Neville 4962PA
- Batteries Three (3) OEM JCI 1150D, 2100 CCA
- Starting Motor –Delco 39MT

# 1.01.08 INSTRUMENT PANEL AND CONTROLS

- Gauges
  - Odometer Display Miles, trip miles, engine hours, trip hours
  - Coolant temperature Electronic
  - Oil Pressure Electronic
  - Transmission Oil Temperature
  - Speedometer Electronic
  - Tachometer Electronic
  - Voltmeter
  - Fuel Electronic
  - Air Pressure
  - Air Cleaner Restriction Gauge
- Warning System Lights and Buzzer
  - Low Fuel
  - Low Oil Pressure
  - High Engine Coolant Temperature
  - Low Battery Voltage
- IP Cluster Display On board diagnostics display
- Controls
  - Cruise
  - Throttle, hand control
- Back Up Alarm 102 dBA
- Audio AM/FM/CD/Weather Band and Clock and four speakers

COMPLY YES NO	
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# 1.01.09 CAB EXTERIOR

- Front End Three (3) piece, tilting, fiberglass
- Grille Chrome
- Front Bumper Full width, aerodynamic, chrome plated steel with License Plate Holder
- Tow Hooks Front, two (2) frame mounted
- Steps One per door
- Mirrors Lang Mekra
  - Rectangular, 7.09" x 15.75"; Breakaway brackets 102" spacing
  - Integral convex
  - Power and Heated heads
  - LED Clearance Lights
  - Convex Look down, Bright Finish, 6"W x 10.25"H
- Windows Tinted glass
- Lighting
  - Headlights Halogen, Composite Aero design for two light system, including daytime running lights
  - Clearance/Marker Five (5) Amber LED
- Horn Single Electric
- Windshield Wipers Electric two (2) Speed integral; Wash and Intermittent Feature
- Fuel Tank
  - 50 Gallon, top draw, mounted left side, under cab
  - Fuel water separator with drain indicator light
- Cab Rear Suspension Air Bag Type
- Electric Trailer Brake/Lights Accommodation Package to rear of frame
- Body Builder Wiring

COMPLY YES NO
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# 1.01.10 CAB INTERIOR

- Interior Premium Level
- Cab Sound Insulation
- Headliner Printed cloth
- Sun Visors Padded vinyl
- Floor Black Rubber
- Door Storage Pockets
- Seats
  - Front- Air Suspension, high back with integral headrest, single chamber air lumbar support
  - Rear Full Width Bench
  - Cloth coverings
  - Molded Plastic armrest on doors
  - Arm Rest inside for Drivers and Passengers seat
- Seat Belts 3-point, lap and shoulder belt type; center rear 2-point lap
- Climate Control Air Conditioner, Heater & Defroster
- Lighting
  - Dome light center mounted, rectangular
  - Courtesy light mounted on doors
- Electrical
  - 12 Volt system
  - Manual reset circuit breakers
  - 12 Volt receptacles (Cigar Lighter and Power Source)
- Additional Options
  - Overhead console
  - One (1) "A" pillar grab handle, front passenger's side
  - Two (2) "B" pillar grab handles,
  - Power Door Locks & Windows

COMPLY	YES	NO

# **1.01.11 COATINGS**

- Cab Canyon Black
- Chassis Interior Gray

COMPLY	YES	NO
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# 1.02 CHASSIS MODIFICATIONS

The following modifications will be made to the chassis by manufacturer.

#### 1.02.05X RUNNING BOARDS

Shall be installed on both sides of the vehicle. They shall be OEM painted "Grip Strut" steps with 0.125" polished aluminum diamond plate trim. A diamond plate guard shall be installed on the OEM fuel and air tanks. Diamond plate trim shall be installed below cab doors extending from the fender to the rear of the cab.

COMPLY YES\_\_\_\_ NO\_\_\_

# 1.02.07A AUTO THROTTLE

A Vanner voltage monitor (volt guard) shall be installed to automatically adjust the auto throttle for changes in electrical load.

COMPLY YES\_\_\_\_ NO\_\_\_

#### 1.02.09A MUD FLAPS

Mud flaps shall be installed behind each rear wheel.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 1.02.10X WHEELS

Stainless steel wheel dress kit shall be installed on OEM aluminum wheels.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 1.02.12X MAP BOX/DRIVER'S CONSOLE

Shall be an integral part of the driver's console. (Section 6.09 related)

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 1.02.33X TRAILER HITCH/PLUG

A Class IV trailer hitch shall be mounted below the rear bumper, with a 10,000 lbs. total rating and 1,375 lbs. tongue weight capacity minimum, receiver opening to be 2" square. A round seven-pin truck trailer connection shall be provided. A Navigator II Model I-1745 electric brake control shall be added to the driver's area of the cab.

COMPLY	YES	NO	

# 1.03 MODULE-TO-CHASSIS MOUNTING SYSTEM

# 1.03.01 MODULE MOUNTING SYSTEM

Hard rubber isolation pads shall be installed between the chassis and module at each mounting location. The rearmost laterals shall be fastened to the top flange of the chassis frame extension with 3/4" grade 5 bolts. At all other mounting locations 3/4" grade 5 eyebolts shall be fastened to the chassis frame web with 3/4" grade 5 bolts. All bolts shall be secured with locking nuts. Modules longer than 167" shall have soft rubber washers added above the forward and rear laterals to accommodate chassis frame torsion.

# 2 MODULAR CONSTRUCTION

All material utilized shall be of the correct type, alloy, and thickness to withstand the intended usage and provide protection against cracking, corrosion, or metal fatigue. All materials utilized shall be of open stock origin, commonly available through local sources, for rapid and economical repair or modification of the body. Any use of proprietary parts or materials in the construction of the body is unacceptable, due to potential delays or difficulties in future repairs or service. NO EXCEPTIONS TO BE TAKEN IN THIS AREA. This specification has been designed and written to fill specific needs of this agency. Where brand name, make, or model of equipment has been specified, no exceptions will be allowed. Where compartment and cabinet sizes have been specified, bidder must bid substantially (plus or minus 1") the size specified.

The module shall have a transferable lifetime structural warranty.

COMPLY	YES	NO

YES

NO.

COMPLY

# 2.01 MATERIAL

WAIEKIAL		
EXTRUSIONS	SIZE	ALLOY
Structural Tubing	1" x 2" x 0.125" sq.	6063-T52
Structural Tubing	2" x 2" x 0.125" sq.	6063-T52
Cross Members	3" x 3" x 0.375"	6061-T6
Cross Members	1.5" x 3" x 0.25"	6061-T6
FORMED SHEETING	SIZE	ALLOY
Skin/Roof/Compartments/Subfloors/Doors	0.125"	5052-H32
Interior Cabinets	0.090"	5052-H32
Diamond Plate	0.125"/0.08"	3003-H32
Stainless Steel	16 ga., 20 ga.	304 # 4B

# 2.02 MODULE DIMENSIONS

Overall Vehicle Dimensions: (Specifications are listed as minimums.)

Length: 30' 7.25" (367.25")

Width: 8' 4" (100") Excluding Mirrors

Height: 10' 2.125" (122.125")

Exterior Module Dimensions: (Specifications are listed as minimums.)

Length: 18' 6" (222")
Width: 8' 4" (100")
Height: 8' 8.375" (104.375")

Interior Dimensions: (Specifications are listed as minimums.)

Length:Forward Wall to Rear Doors215"Width:Left Wall to Right Wall96"Floor Width:Streetside Cabinets to Curbside cabinets43.25"Height:Floor to Ceiling84"

# 2.03 STRUCTURAL FRAMING

Sidewall and rear wall construction shall consist of 2" x 2" x 0.125" aluminum square tubing extensions welded together with a maximum of 14" centers. 1" x 2" x 0.125" aluminum tubing may be utilized in addition to 2" x 2" tubing to accommodate custom compartment sizes. The bottom of the wall structure shall be sealed with welded 2" x 2" tube, 2" x 2" angle, or 0.125" plate depending upon location. Wall structure shall be capped with 2" x 2" x 0.125" header upon which 2" x 2" x 0.125" roof structure is welded. This process provides a unitized roll cage structure for greater occupant safety. The front wall structure shall be constructed of a minimum of 1.250" x 3.875" x 0.125" formed aluminum channel to allow ample space for wiring raceways, heater A/C hoses, and cold air return duct.

COMPLY YES\_\_\_ NO\_\_\_\_

### 2.04 FOUNDATION SYSTEM

Shall consist of a 0.125" aluminum sheet subfloor with foundation members securely welded under the subfloor. Members shall consist of six (6) 3" x 3" x 0.375" structural angles, with two (2) 0.250" x 1.5" aluminum members running lengthwise between the structural angles.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 2.05 MODULE SEAMS

All body and compartment seams at or below floor level shall be full seam welded. The entire perimeter of the subfloor shall be completely sealed with a caulking material, creating a watertight, dust-free module environment.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 2.06 EXTERIOR SKIN

In addition to welding the exterior skin to structural framing, a Norton very high bond system shall be utilized full length on all wall and roof frame members. A polyurethane adhesive sealant shall be applied to the edges of structural tubing at the exterior wall surfaces.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 2.07B MODULE ROOF

In order to improve module strength and reduce roof seams the following roof system shall be utilized. The roof shall be seamed in the center, have a 1.500" radius at the corners, and provide a weatherproof overlap of the aluminum side sheets 5.250" below the roofline. The roof shall be supported by positive contact between sidewall framing and roof framing. All seams on the roof surface shall be full seam welded on the outside and caulked on the inside. The module roof front edges shall be constructed to allow mounting of the recessed light bars. This roof design shall have been tested to meet A.M.D. standards and a detailed exploded drawing of the roof structure shall be provided. In order to avoid the possibility of paint and/or weld cracking, no extrusions shall be used in the exterior construction of the roof or corners of the vehicle.

#### 2.08X MODULE EXTERIOR COMPARTMENTS

All compartments are constructed from formed 0.125" aluminum and are securely welded to the subfloor and structural framing. A baffled drain hole shall be provided in all exterior compartment bottoms that extend below the floor line. All exterior adjustable shelves shall be mounted on heavy-duty aluminum unistrut track, which is securely welded to compartment interiors. Each shelf shall support at least 300 lbs. of equipment.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **COMPARTMENT #1**

**Interior Dimensions** – 36"W x 11.5"H x 25"D

**Doorway Dimensions** – 43"W x 11.5"H

**Location** – Streetside, forward

**Shelving** – None

**Door(s)** – Single, flip down

**Light(s)** – One (1) standard

**Additional Instructions** – The battery charger shall be located in this compartment.

COMPLY YES NO
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#### **COMPARTMENT #2**

**Interior Dimensions** – 44"W x 28"H x 25"D

**Doorway Dimensions** – 44"W x 28"H

**Location** – Streetside, forward of wheel well

**Shelving** – None

**Door**(s) – Single hinge

Light(s) - None

**Additional Instructions** – An Onan diesel generator shall be installed in this compartment. Generator shall be installed so as to be adequately serviceable and fueled from vehicle tank. (Section 6.44X related)

This compartment shall be vented by louvers in the upper and lower portions of the door. A latch shall be provided to hold the door up for service.

Compartment shall be lined with lead lined insulation.

COMPLY YES NO		COMPLY	YES	NO
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#### **COMPARTMENT #3**

**Interior Dimensions** – 56"W x 66"H x 6"D

**Doorway Dimensions** – 56"W x 66"H

Location – Streetside, rear

**Shelving** – None

**Door(s)** – Double

**Light(s)** – One (1) Standard

**Additional Instructions** – Four (4) vertical Unistrut tracks shall be installed on the back wall. Two (2) painted aluminum brackets with notches to hang shovels, rakes and miscellaneous equipment shall be installed towards the top of the compartment. Two (2) additional hold off brackets shall be installed to attach clips to hold the handles of *customer supplied and installed* equipment. (Section 4.65X related)

COMPLY	YES	NO
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# **COMPARTMENT #4**

**Interior Dimensions** – 51"W x 11.75"H x 25"D

**Doorway Dimensions** – 51"W x 11.75"H

**Location** – Streetside, rear

**Shelving** – None

**Door(s)** – Single, flip down

**Light(s)** – One (1) Standard

**Additional Instructions** – Two (2) SCBA brackets shall be installed in the forward portion of this compartment, one (1) with pack. A vertical divider shall be installed, attached to the floor, aft of the SCBA storage.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **COMPARTMENT #5 – Robot Inside/Outside Access**

Interior Dimensions – 56"W x 80"H x 68.75"D

**Doorway Dimensions** – 56"W x 80"H

**Location** – Curbside, rear

Shelving - None

Door(s) - Double

**Light(s)** – See Section 6.16

Additional Instructions – The compartment shall provide inside/outside access to the Robot storage and access to load and unload robot. Provisions for the ramp storage shall be in a pocket, and raise the diamond plate floor up 6". (Section 4.25 related)

Two (2) small cleats shall be installed one (1) on each interior door skin, close to the bottom for lacing robot cable thru. (Section 4.12X related)

COMPLY YES\_\_\_ NO\_\_\_

#### **COMPARTMENT #6**

Interior Dimensions – 52"W x 11.75"H x 25"D

**Doorway Dimensions** – 52"W x 11.75"H

**Location** – Curbside, rear lower

Shelving – None

**Door(s)** – Single, flip down

**Light(s)** – One (1) standard

**Additional Instructions** – An air chuck outlet shall be mounted on the front of this compartment. (Section 4.50X related)

# **COMPARTMENT #7**

Interior Dimensions – 52.5"W x 36"H x 25"D Lower section, 6"D Upper section

**Doorway Dimensions** – 52.5"W x 36"H

**Location** – Curbside, above wheel well

**Shelving** – One (1), fixed roll out, tip down tray with 10"H sides

**Door(s)** – Double, hinged top and bottom

**Light(s)** – One (1) Standard

**Additional Instructions** – The roll-out tip-down tray shall be mounted in the lower portion of compartment on 250 lb. slides. A fixed painted box approximately 28"L x 4"W shall be centered into the aft section of the tray with a hinged lid. Lid shall be painted with American Safety AS2500 to prevent wear. Anti-static foam shall be installed inside the box cut to store shells.

There shall be a vertical divider at the forward end of the box. The forward section of the tray shall have foam designed and cut to store PAN gun equipment.

Upper section shall have a flat screen TV mounted in the aft section and two (2) fixed shelves in the forward section. One (1) 110V outlet and one (1) RCA jack shall be mounted on the ceiling of the cabinet. (Section 6.60X related) The TV shall be connected to the Intec camera, and shall be able to switch between the robot camera and the Intec camera.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **COMPARTMENT #8- Inside/Outside Access**

**Interior Dimensions** – 52"W x 77"H x 26"D

**Doorway Dimensions** – 52"W x 92"H

**Location** – Curbside, forward of wheel wells

**Shelving** – See Cabinet #18

**Door(s)** – Double

**Light(s)** – One (1) standard

**Additional Instructions** – This compartment shall provide inside/outside access to the bomb suit storage area, Cabinet #18

This compartment shall be vented by louvers in the upper and lower portions of the doors. The below floor portion shall provide storage space accessible from the exterior only. An electric step shall be installed below the compartment. See Cabinet #18 for additional instructions.

COMPLY	YES	NO
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### 2.09 MODULE DOORS

The doors shall be box pan formed with a total thickness of 2".

COMPLY	VEC	NO
COMPLY	YES	NO

#### 2.09.01 **DOOR SEAL**

Each doorframe will have a 0.875" flange for the installation of an air cell hollow core, 360-degree compression door seal. This seal creates watertight, dust-free compartment integrity. Door seal shall be knock-on type.

COMPLY	YES	NO	

#### 2.09.02X DOOR HINGES

Shall be full length, piano type, stainless steel hinges, 2.5" wide with a 0.25" pin. The hinges shall be attached with 12 x 3/4 stainless steel truss head screws spread 4" apart and staggered 0.5" horizontally for additional strength and adjustability. Hinges shall be staked every 4". All curbside and streetside doors shall be hinged on the forward sides. All rear doors shall be hinged on the outboard sides. Compartments #1, 3, 5, and 6 shall be hinged on the lower side. Compartment #7 door to be a double door hinged top and bottom. Bottom door shall be capable of opening independently of the upper door.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 2.09.03X DOOR LATCHES

Shall be flush mounted, stainless steel, Versch paddle type slam latches with rotary latch striker posts, which meet FMVSS 206 requirements. Striker shall be adjustable and shall be secured with a nut from behind doorframe. The striker washer will not be removed. Cold rolled, threaded 0.162" steel rods shall be used to activate dual rotary latches. Once final adjustments to latches are made, threads are to have Locktite or equivalent applied. All double door compartments shall have an exterior stainless steel paddle handle and rotary latches on each door. Doors will latch to doorframe mounted striker posts only and not to one another. All entrance doors shall have interior handles with dual point, rod actuated, rotary latch systems, which are lockable inside and out. All latches will have a non-slip surface on the underside of the latch. All compartment and module access doors shall be keyed for #J236 keys.

In addition to the regular door latch system, all doors shall have a separate high-security rated "deadbolt" locking mechanism installed. These shall be keyed differently from the rest of the vehicle's keys. Passage door deadbolt shall be lockable from the inside and outside, with compartment door deadbolts blank on the interior side.

COMPLY YES\_\_\_\_ NO\_\_\_\_

### 2.09.04X COMPARTMENT DOOR CONTROL

A heavy-duty, double spring door control capable of holding the door open at approximately a 90-degree angle on any road surface shall be installed at the top of each compartment door on Compartments #3, 5 and 8. Compartment's #1, 4, and 6 doors shall have a 1" rubber bumpers installed. Compartment #2 shall have a latch to hold door up 180 degrees for access to generator. Compartment #7 hinged down door shall have a rubber bumper installed and open independently of the upper door. Compartment #7 upper door shall have a gas shock to hold the door open.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 2.09.05X CURBSIDE DOOR CONTROL

Shall be a heavy-duty, double spring door checks installed at the top of the doors. These door checks will hold the passage doors open at approximately a 90-degree angle on any road surface.

# 2.09.07X COMPARTMENT DOORSKINS

Shall be 0.080" bright aluminum diamond plate and be removable to service door hardware. Red/white 1" conspicuity tape shall be installed on the vertical edge of each door. Compartment #2 shall not have a door skin to provide adequate air flow for the generator.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 2.09.08X ENTRANCE DOORSKIN

Shall be 0.080" bright aluminum diamond plate and be removable to service door hardware. Red/white 1" conspicuity tape shall be installed on the vertical edge of the side passage door. Each door skin shall be two pieces, split below the window.

COMPLY YES\_\_\_\_ NO\_\_\_

#### 2.09.09X ENTRANCE DOORWAYS

One (1) curbside module entrance doors shall be provided. The curbside doorway dimensions shall be 31"W x 81.75"H. There shall be a double-keyed dead bolt installed below the paddle latch.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 2.09.10 THRESHOLDS

All compartment and module access doorframes shall have full width formed stainless steel threshold plates to protect the lower edge of frame.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 2.10X MODULE INTERIOR CABINETS

Shall be formed of 0.090" aluminum and shall be securely welded or mounted to the structural framing. All interior adjustable shelves shall be mounted on 1" wide aluminum Unistrut track.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **CABINET #1**

**Dimensions** – 41.5"W x 23"H x 14.75"D

**Location** – Streetside, upper forward

**Shelving** – One (1) adjustable

**Door(s)** – One (1) hinged polycarbonate door with two (2) gas shocks lift system and a South Co. positive latch.

**Additional Instructions** – Two (2) 110V outlets shall be installed on the back wall. A DVDR and under the counter AM/FM/CD player shall be installed in this cabinet. (Section 6.38X, and 6.60X related)

COMPLY YES NO

# **CABINET #2**

**Dimensions** – 41.5"W x 23"H x 14.75"D

**Location** – Streetside, upper center

**Shelving** – One (1) adjustable

**Door(s)** – One (1) hinged polycarbonate door with two (2) gas shocks lift system and a South Co. positive latch.

Additional Instructions – One (1) 110V AC outlet shall be installed on the back wall.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **CABINET #3**

**Dimensions** – 36.5"W x 25"H

**Location** – Streetside, upper center

Shelving - None

**Door(s)** – None

**Additional Instructions** – One (1) 110V outlet shall be installed behind the closeout. A flat aluminum panel shall be provided to mount a 26" flat screen TV into this location. TV shall be near flush with cabinet #2. (Section 6.60X related).

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **CABINET #4**

**Dimensions** – 21.5"W x 24.25"H x 25"D

Location – Streetside, upper center

**Shelving** – One (1) adjustable

**Door(s)** – One (1) hinged aluminum door with one (1) South Co. positive latch

**Additional Instructions** – A wire raceway shall be located against the back wall with three (3) 110V receptacles facing up. Install a 2" diameter hole along the back side of shelf for customer use to run wires after delivery. Install louvers in the upper and lower portion of the cabinet door. Upper set of louvers shall be inverted.

COMPLY YES NO I
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# **CABINET #5**

**Dimensions** – 54"W x 31.5"H x 19"D

**Location** – Streetside, rear upper

**Shelving** – Two (2) adjustable with 2" flanges

**Door(s)** – Double, aluminum with paddle latches and heavy-duty, double spring door hold opens.

**Additional Instructions** – One (1) 110V AC outlet and one (1) 12V DC outlet shall be installed on the back wall. A mini security camera shall be mounted centered above this cabinet. (Section 6.60X related).

COMPLY YES NO

# **CABINET #6**

**Dimensions** – 57.75"W x 14"H x 19"D

Location - Streetside, rear mid

**Shelving** – None

**Door(s)** – None

**Additional Instructions** – Two (2) 110V receptacles shall be installed along the aft wall. A 2.5" channel shall be cut in the back center to house a Remotec 90<sup>o</sup> connector. Two (2) straps for holding down battery chargers shall be shipped loose. Front flange shall be reinforced.

COMPLY YES\_\_\_ NO\_\_\_

# **CABINET #7**

**Dimensions** – 21.5"W x 32.5"H x 25"D

**Location** – Streetside, aft of action area

**Shelving** – None

**Door(s)** – None

**Additional Instructions** – A recessed refrigerator with an 110V AC outlet shall be installed in this cabinet. (Section 5.28X related)

**CABINET #8 – Work Station** 

**Dimensions** – 130.5"W x 30"H x 25"D

**Location** – Streetside

Shelving - None

**Door(s)** – None

**Additional Instructions** – It shall contain an attendant control panel, and a generator control panel. A wire race way shall run the full width of the counter top with five (5) duplex 110V receptacles, three (3) 12V DC cigar style receptacles, and two (2) On/Off switches with labels installed into the top surface.

A painted white steel marker board shall be installed on the back wall above the aft section of the countertop.

A full depth counter top shall be located below the wall. The counter top shall be one-piece 16 gauge, 304 stainless steel, with a 0.5" turned down lip. Two (2) hinge up polycarbonate covers shall be installed over the counter top between the two seating areas. A recessed panel shall be installed over the forward seating area to hold a Remotec control panel. Control panel shall be secured in place.

Three (3) Thin-Lite Model #612 light with 12VDC dual 11" fluorescent bulbs shall be installed to light the work area.

Two (2) seating areas 23.875"W x 29"H shall be provided below the counter. Two (2) office chairs shall be supplied and installed. A strap and footman loops shall be provided over the openings to hold the chair in place while vehicle is in motion.

Three (3) Sigtronic headsets, and three (3) connection points shall be installed *exact* location to be determined at pre-construction meeting.

Two (2) color flat panel TV's shall be mounted in this area on the wall above the countertop. One (1) directly above the seating area and one (1) just to the left on a swivel bracket. (Section 6.50X related) A painted gray panel shall be installed on the back wall for mounting Remotec connection points and volume controls. The Video / Vehicle / and Tool control panel shall be recessed into the counter top. (Section 6.18X related)

A bracket and docking station, for a Panasonic Toughbook 19, shall be installed on the counter top above the aft seating position.

A painted aluminum bracket and strap shall be installed at the aft end of the counter top to hold a Logos x-ray machine. A painted aluminum bracket shall be mounted to the bottom of cabinet #2 to hold a light table.

The 110V load center shall be recessed into the forward wall. (Section 6.21X related)

COMPLY YES NO
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**CABINET #9 – Drawers** 

**Dimensions** – 15.25"W x 29"H x 19"D

**Location** – Streetside, forward

Shelving - None

**Door(s)** – None

**Additional Instructions** – The cabinet shall consist of three (3) drawers. Each drawer shall operate on 18" slides rated at 300 lbs. per set and have a gas shock hold open/closed device to ensure drawers do not accidentally open or close during operation of the vehicle.

The upper two (2) drawers shall be formed of 16 ga. steel welded construction, painted to match the interior, and formed structural support on the sides and front of drawers. The drawers shall have machine stamped divider supports along the side for at least four (4) dividers per drawer with four (4) adjustable dividers provided with each drawer.

The lower drawer shall be formed 0.090" aluminum and welded construction painted to match the interior. Interior drawer dimensions shall be 13"W x 12"H x 19"D. This drawer shall be set up for hanging file storage.

COMPLY YES NO
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#### **CABINET #10 – Drawer**

**Dimensions** – 39.875"W x 12.375"H x 25.375"D

**Location** – Streetside, center

Shelving - None

**Door(s)** – None

**Additional Instructions** – A pull out drawer shall operate on 18" slides rated at 300 lbs. per set and have a gas shock hold open/closed device to ensure drawer does not accidentally open or close during operation of the vehicle. It shall be formed 0.090" aluminum and welded construction painted to match the interior.

COMPLY YES NO I
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# **CABINET #11 – Drawer**

**Dimensions** – 17.875"W x 5"H x 25.375"D

**Location** – Streetside, below work area

Shelving – None

Door(s) - None

**Additional Instructions** – Drawer shall operate on 18" slides rated at 300 lbs. per set and have a gas shock hold open/closed device to ensure drawers do not accidentally open or close during operation of the vehicle. It shall be formed 0.090" aluminum and welded construction painted to match the interior.

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# **CABINET #12**

**Dimensions** – 21"W x 12.25"H x 19"D

Location – Streetside, below cabinet #11

**Shelving** – None

**Door(s)** – None

**Additional Instructions** – Cabinet shall be used for open storage and have one (1) strap with buckle installed over the opening.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **CABINET #13 – Drawer**

**Dimensions** – 24.625"W x 11"H (interior minimum) x 19"D

**Location** – Streetside, below work station

**Shelving** – None

Door(s) - None

**Additional Instructions** – Drawer to be made of 10 gauge steel. Drawer to have an interior hinge-up lid that will open past 90 degrees. The drawer shall be lined with 0.5" plywood, and Rhino liner, including the ceiling. Storage for a *customer supplied* and installed 10" x 10" detonation cord against the back wall and a painted aluminum tray with aluminum handle in the front portion. Tray shall be spaced off the floor of the cabinet. (Section 5.60X related)

A dead bolt shall be located on the drawer front and keyed to match cabinet #24 dead bolt. Dead bolts shall be keyed differently from all exterior dead bolts. (Section 5.60X related)

COMPLY YES\_\_\_ NO\_\_\_\_

# **CABINET #14**

**Dimensions** – 58.75"W x 27"H x 19"D

**Location** – Streetside, rear

Shelving - None

Door(s) - None

**Additional Instructions** – Interior and floor of this cabinet shall be lined with diamond plate and open to cabinet #17 main robot storage area. Four (4) "D" ring tie downs and a strap shall be provided to secure a small robot: Two (2) on the back wall 18" off floor level, and two (2) on the floor just outside of the cabinet.

# **CABINET #15 – Robot storage Inside/outside accessible**

**Dimensions** – 69"W x 78"H x 58.75"D

**Location** – Rear

Shelving - None

**Door(s)** – None

Additional Instructions – Cabinet shall be used for Robot storage and be accessible from Compartment #5. Floor level shall be raised 6" to accommodate below floor storage of the ramp. The floor and 42" up the back wall shall be covered with diamond plate aluminum. The upper back wall shall be painted gray to match the interior. An 8"H x 3"D wire race way shall be installed along the ceiling. A Robot fiber optic connection point shall be mounted onto the wire raceway 20" in from the curbside wall, and 4" from ceiling. A painted aluminum bracket shall be installed to hold a fiber optic junction box. (Section 6.70X related)

Two (2) 110V receptacles shall be installed on the back wall 12" off floor level, and accessible from the exterior. Six (6) "D" ring tie downs and three (3) straps shall be provided to secure a robot.

COMPLY YES NO
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#### **CABINET #16**

**Dimensions** – 26"W x 20"H x 11"D

**Location** – Curbside, rear upper

**Shelving** – One (1) adjustable

**Door(s)** – Hinged aluminum with two (2) gas shocks lift system and a South Co. positive latch.

**Additional Instructions** – One (1) 110V AC outlet shall be installed on the back wall. A smoke detector shall be installed on the aft side of this cabinet. (Section 5.40X related)

### **CABINET #17**

**Dimensions** – 26"W x 20"H x 11"D

**Location** – Curbside, rear center

**Shelving** – Two (2) adjustable

**Door(s)** – Hinged aluminum with two (2) gas shocks lift system and a South Co. positive latch.

**Additional Instructions** – One (1) 110V AC outlet shall be installed on the back wall.

COMPLY	VEC	NO
CUMPLY	YES	NO

#### **CABINET #18 – Inside/Outside Access**

**Dimensions** – 52"W x 75"H x 26"D

**Location** – Curbside

Shelving – Four (4) adjustable: One (1) 32"W, three (3) 19"W

**Door(s)** – Double, aluminum with paddle latches

**Additional Instructions** – This compartment shall provide inside/outside access. The 32"W adjustable shelf shall be installed in the forward section with a heavy-duty bracket attached to the bottom of the shelf. Bracket shall be built to hold three (3) heavy-duty hangers rated at 120 lbs. A muffin fan shall be installed for ventilation. The fan shall be wired to shoreline and connected to a four position push button timer switch mounted on the forward wall with label. (Section 6.80X related)

The aft area shall contain three (3) adjustable shelves with Mate'Flex. Shelves shall be spaced with minimum 17"H clear opening above and below each shelf.

A compartment light shall be installed in the ceiling of this cabinet in the forward section. An 18" grab bar shall be installed on the forward side of the vertical divider, towards the exterior.

COMPLY YES NO
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#### **CABINET #19 – Work Station**

**Dimensions** – 55"W x 21.125"H x 20"D

**Location** – Curbside, center

Shelving - None

**Door**(s) – None

**Additional Instructions** – This area shall be a work station with a full depth counter top shall be located below the wall. The counter top shall be one-piece Meganite Silver Mist Corian. Counter top shall be easily removable for changing. There shall also be an 110V AC power strip running the full width of the counter top with four (4) duplex 110VAC outlets and two (2) 12V DC outlets.

One (1) connection point for Sigtronic headset jack shall be installed *exact location to be determined at pre-construction meeting*.

The entire work station area shall be lighted utilizing a 36" fluorescent light.

Wall behind the workstation shall be painted white steel.

COMPLY	YES	NO

#### CABINET #20 – Drawers

**Dimensions** – 55"W x 12"H x 19.625"D

**Location** – Curbside, below work station

**Shelving** – None

Door(s) - None

**Additional Instructions** – Four (4) 24"W x 5"H x 19.625"D drawers shall be installed in this area and operate on 18" slides rated at 300 lbs. per set and have a gas shock hold open/closed device to ensure drawer does not accidentally open or close during operation of the vehicle. They shall be formed 0.090" aluminum and welded construction with an automotive gray enamel finish.

A fixed center divider shall run front to back and be installed in the lower two (2) drawers.

COMPLY YES NO	
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# **CABINET #21**

**Dimensions** – 23.25"W x 14"H x 12.34"D

**Location** – Front, upper right

Shelving - None

**Door(s)** – Hinged aluminum with gas shock lift system and a South Co. positive latch.

**Additional Instructions** – A Remotec connector shall be installed in the back wall of this cabinet with access to the telescoping pole. Access holes with all connections installed for use with Remotec antenna and controller. The Will-Burt tower controllers shall be installed and stored in this cabinet.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### **CABINET #22 – Electrical Cabinet**

**Dimensions** – 30"W x 19.5"H x 9"D

**Location** – Front, upper center

Shelving - None

**Door(s)** – Aluminum, hinged, swing up door with a hold-open device, twist/slam latch, and an automatic compartment light.

**Additional Instructions** – This cabinet shall house the electrical component module, and battery charger. The atomic clock shall be installed on the face of the cabinet.

COMPLY YES\_\_\_ NO\_\_\_\_

#### **CABINET #23**

**Dimensions** – 27.75"W x 52.25"H x 12.75"D

**Location** – Front, right

**Shelving** – Two (2) adjustable

**Door(s)** – Hinged aluminum with two (2) South Co. positive latches.

**Additional Instructions** – There shall be one (1) 12V DC Cigar style outlet and one (1) 110VAC outlet installed on the rear wall. Door shall swing into the curbside passage door step well.

COMPLY YES\_\_\_ NO\_\_\_

# **CABINET #24 – Drawer**

**Dimensions** – 26"W x 13"H x 13.38"D

**Location** – Front, right lower

Shelving - None

**Door(s)** – None

**Additional Instructions** – This drawer shall operate on 300 lbs. slides. It shall be shall be 10 gauge steel and welded construction painted gray to match the interior.

A dead bolt shall be located on the drawer front. Lock shall match cabinet #13.

The drawer shall be lined with 0.5" plywood, Rhino liner, and have a lid that opens past 90 degrees and is lined with 0.5" plywood.

Drawer shall be designed to hold two (2) 10" x 10" detonation cords with space for 15 to 20 blasting caps centered between. Anti-static foam shall be installed with 0.25" diameter cut outs for blasting caps spaced approximately 1" apart. Foam shall be held in place with plywood.

COMPLY	YES	NO

# 2.11X SIDE DOORSTEP

A recessed curbside double doorstep shall be provided which is 11.5" deep x 31" wide. There shall be a drain hole and an open grate step plate, which is removable for cleaning purposes. Polished aluminum diamond plate kick panel will be installed on the sides and face of doorstep.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 2.14A WHEELWELL LINERS

Shall be installed in the wheel wells over the rear wheels. The liners shall be formed of aluminum.

# 3 COATINGS AND FINISHES

# 3.01 MODULE FINISH PREPARATION

The module shall be seam sealed and all imperfections on aluminum surfaces of module shall be sanded smooth. The entire exterior shall be mechanically etched and washed with wax and grease remover to ensure proper primer and paint adhesion.

COMPLY YES\_\_\_ NO\_\_\_

# 3.02 MODULE PRIMER

Module shall be primed with urethane primer prior to applying the finish coat of acrylic urethane paint.

COMPLY YES\_\_\_\_ NO\_\_\_

#### 3.03 PAINT TYPE

Shall be "Sherwin Williams" acrylic urethane.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 3.04 COLOR SCHEME

Base color G8-33631 Alt 2White

Stripe #1 Color: Black (GB-56590)

Width: Rear of module, wrapping around the sides

approximately 4.5"

Reference: Drawings # 1, 2, 3

Stripe #2 Color: Black fade to blue towards the center

Width: 11.75 Style: Beltline Material: Vinyl

Location: Sides of module Reference: Drawings #1, 3

COMPLY YES\_\_\_\_ NO\_\_\_

# 3.05X LETTERING/DECALS

Item #1 Lettering: "SHERIFF"

Font: Arial italicized Color: Black faded to Blue

Material: Vinyl Size: 11.75"

Location: Both sides of the module

Reference: Drawings #1, 3

Item #2 Lettering: "SAN DIEGO COUNTY"

Font: Arial

Color: Gold with black outline

Material: Scotchlite

Size: 5"

Location: Both sides of the module

Reference: Drawings #1, 3 centered in "SHERIFF"

Item #3 Decal: San Diego Sheriff logo

Material: Printed on Scotchlite color scheme to match current San

Diego Sheriff logo

Size: 50"W x 43"H Location: Rear of the module

Reference: Drawing #2

Item #4 Decal: "Customer Supplied" Department Decal

Location: Sides of module forward of lettering installed on stripe

Reference: Drawing #1, #3

Item #5 Window Perforated Decals

Color: White with black stripe. Stripe to line up with stripe on

module.

Location: Over curbside passage door window

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 3.06X COMPARTMENT FINISH

All compartments interiors shall be painted with gray textured polyurethane, except compartment #5 inside/outside (accessible through cabinet #15). The lower portion of back wall to be diamond plate, the upper portion to be painted light gray (G8-51748) to match the interior. Compartment #8 inside/outside (accessible through cabinet #18) to be painted gray textured polyurethane.

COMPLY YES NO

### 3.07X INTERIOR CABINETRY FINISH

All interior cabinetry shall be sanded, etched, washed, primed, and painted light gray (#G8-51748), except cabinet #14. Cabinet #14 to be covered in diamond plate aluminum.

COMPLY YES\_\_\_\_ NO\_\_\_

#### 3.08 MODULE UPHOLSTERY

Shall be Vinyl Naugaform formfit 2 / Dove gray, and be seamless.

# 3.09X MODULE FLOORING MATERIAL

Shall be Genome (#TFM2702) Altro Transflor Meta Slip-Retardant Sheet flooring providing durability, ease of maintenance and stain resistance. It shall contain a high concentration of microscopic aluminum oxide particles and colored quartz crystals suspended throughout the thickness with silicon carbide grains in the entire wear surface for slip-retardant performance. It shall have a bacteriostat incorporated to give flooring excellent anti-bacterial activity and an overall thickness of 0.11" nominal. Flooring shall be manufactured for Wear Resistance to meet ASTM C 501, indentation resistance in accordance with ASTM F 1303 and ASTM F 970, Grade 1 standards, shall meet ASTM D 2047 Slip Retardant, ASTM F 970 Static Load, ASTM E648, CMVSS, FMVSS 302, CAN ULC S102.2 Fire Data Tests. (Section 5.04 Related)

An insulated floor shall be installed over the subfloor. It shall be constructed with square tubing (0.75" x 0.75" x 0.125"), filled with 0.75" thick polystyrene foam insulation, and covered with 0.125" aluminum sheet. (Section 2.04 related)

Compartment #4 shall have aluminum diamond plate installed over the aluminum subfloor to assist in the movement of the robots from the side entries. This floor shall be raised 5" from the remainder of the interior floor.

COMPLY YES NO
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### 3.10 COMPARTMENT LINING

Compartment floors shall be lined with light gray Mate'flex material and all shelves with easy sweep mat.

COMPLY YES NO	OMPLY	YES	NO
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#### 3.11X CABINET LINING

Interior cabinet shelves shall be lined with easy sweep mats, which are removable for ease of cleaning, except cabinet #20 aft shelves. Mate'Flex shall be installed on the three (3) shelves in cabinet #20.

COMPLY	YES	NO

# 3.12 SURFACES AND FINISHES

All surfaces and finishes shall be impervious to soap, disinfectants, and water, to permit washing and sanitizing.

# 3.13 AUTOMOTIVE UNDERCOATING SEAL

The entire chassis and module underbody (excluding drive shafts, wheels, exhaust system, and lubrication fittings, per manufacturer's specifications) shall be sprayed with undercoating for reduced corrosion and added sound deadening.

COMPLY YES NO	COMPLY	YES	NO
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#### 3.15A NON-SLIP ROOF

The roof shall be finished as a non-slip surface.

COMPLY	YES	NO
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# 4 MODULE EXTERIOR

#### 4.01X STEP/BUMPER

Shall be a welded construction of 6" x 4" steel tubes. A diamond plate aluminum 0.090" aluminum cover shall be installed over the tubing to provide a 7" step. The outermost 12" of each end shall be angled to prevent dragging of corners in high angle of approach/departure areas. The bumper shall be bolted directly to the chassis frame extension using high strength Grade 5 bolts. Bumper shall be easily removable and replaceable in case of damage.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 4.02 RUB RAILS

Shall be bright finished extruded aluminum of a double channel design and 0.125" wall thickness for maximum strength. Rub rails shall be 2.5" high x 0.75" wide and run along the lower edge of body, interrupted only by wheel well opening.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 4.03 FENDER RINGS

Shall be installed on the module. They shall be bright polished aluminum with a rounded outer edge following the full contour of the wheel well opening.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 4.04 DRIP RAIL

Shall be extruded, anodized aluminum running full length of module at top of sides, front, rear and over each exterior compartment. Drip rails shall be installed with bonding tape that will withstand exposure to the elements. They shall be installed to allow easy replacement without the use of mechanical type fasteners, and finished with 45 degree angled ends to avoid hooking materials which brush against the vehicle causing damage.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 4.05 ROCK GUARDS

Made of bright aluminum diamond plate shall cover front module corners 24" up from bottom of the body, 2.5" down the side of body, and 15" across the front of the body.

COMPLY YES NO

# 4.06 REAR STEP GUARD

Made of bright aluminum diamond plate shall extend from top of rear step to the bottom of rear doors, full width formed around corners, and 2.5" forward on each side.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 4.08X MODULE WINDOWS

Shall have black anodized aluminum frames, rubber gaskets, and be attached with screws for ease of replacement. The side door window shall be 18.75" x 37.5" with dark tinted fixed glass.

# 4.11X TELESCOPIC LIGHTS

Two (2) 350 watt Havis Shield Kwik Raze Tripod truck mount lights shall be installed on the rear of the module. An on/off switch shall be provided on each light head. An 110V AC weatherproof outlet shall be installed on the module rear near each light. A stainless steel plate shall be installed on the module behind the lights to protect paint.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 4.12X ANCHOR POINTS

Three (3) chrome plated cleats shall be installed to keep the robot cable off the ground. One (1) on the front of the chassis bumper, just inset from the curbside siren speaker, and one (1) on each interior door skin of compartment #5, near the bottom outside edge.

COMPLY YES\_\_\_ NO\_\_\_

#### 4.17X STEPS

Two (2) electric steps shall be provided and mounted: one (1) under Compartment #8, and one (1) below the curbside passage door. Step below compartment #8 shall be controlled by a switch on the compartment interior door skin. An engraved label shall be installed above the switch. Step below the curbside passage door shall automatically open and close with the door switch. Steps shall automatically retract when the parking brake is released.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 4.21X GRAB BARS (EXTERIOR)

Two (2) 12" grab rails shall be installed vertically on the rear of the module, one (1) inboard of each telescopic light. Two (2) 12" grab rails shall be installed for access to the roof above the fold down steps on the streetside of the module.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 4.20X AWNINGS

One (1) 17.5-foot Carefree of Colorado Apex 110V AC electric awning shall be installed on the curbside roof of the module with a wind sensor. Awning shall have a black case with a white canvas awning. Awning to be controlled by a control panel on the wall just inside the curbside passage door.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 4.23X FOLD-DOWN STEPS

Five (5) folding step/handholds shall be mounted on the streetside of the module. Two (2) folding step/handholds shall be mounted on the front streetside of the module for access to the cab roof. A warning label shall be installed above the folding step off the front of the module stating: "FOLD STEP BEFORE OPPERATING VEHICLE"

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 4.24X WHEEL CHOCKS/HOLDERS

Two (2) CPI Wheel Chock Holders shall be installed; two (2) on the streetside forward of the wheel well.

# 4.25X CURBSIDE RAMP

One (1) 94"L x 49.5"W ramp constructed of 0.125 aluminum sheet with support bracings shall be provided and installed in a pocket accessible thru compartment #5. Center section of the ramp shall be covered with American Safety AS2500 aggressive spray on anti slip flooring.

Two (2) centered spring loaded handles shall be installed in a notch below the ramp. Ramp designed to be placed at the curbside door for loading/unloading robot. Ramp shall be capable of holding 800 lbs.

COMPLY YES\_\_\_ NO\_\_\_\_

#### 4.50X MISCELLANEOUS MODIFICATIONS

An Air Chuck connection shall be added on the forward portion of Compartment #6 for easy access to the OEM Air Compressor Tank.

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 4.65X MISCELLANEOUS EQUIPMENT

Six (6) tool clamps shall be provided and installed in compartment #3.

# <u>5 MODULE INTERIOR</u>

All interior hangers, supports, fasteners, latches, and hinges shall be of a near flush type design when not in use. The compartment shall be free of sharp projections. Exposed edges and corners shall be broken with a radius, chamfer, or covered with aluminum trim, plastic molding, or rubber edging.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 5.01 UPPER WALL COVERING

Shall be covered with light gray heavy grade 0.125" ABS vinyl. All panels shall be attached with a Norton very high bond system.

COMPLY YES\_\_\_ NO\_\_\_

#### 5.02 HEADLINER

Shall be fiberglass reinforced 0.080" "Glasboard" with textured white surface.

COMPLY YES\_\_\_\_ NO\_\_\_\_

### 5.03X MODULE ACCESS OPENING BUMPERS

Shall be located over all module access openings and shall be made with 1" high-density foam covered with Vinyl Naugaform formfit 2 / Dove Gray, and be seamless.

COMPLY YES\_\_\_\_ NO\_\_\_

### 5.04X LOWER WALL COVERING

The lower portion of the streetside wall and the wall below the curbside work station shall be covered with polished stainless steel.

COMPLY YES\_\_\_\_ NO\_\_\_

## 5.06 ACCESS DOOR GRAB RAILS

The curbside module access door shall have a 12"L x 1.250"D stainless steel grab handle.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 5.10E ATTENDANT SEAT

A folding jump seat with spring loaded seat irons shall be installed on the front wall. The wall shall be reinforced at the mounting location to support jump seat. It shall have a padded seat and backrest and one (1) seat belt.

#### 5.16 INSULATION

The module sides, ends, roof, doors, and floor shall be insulated to enhance the interior environment and to prevent heat, cold, and external noise from entering the module. The insulation shall be a non-settling polystyrene foam plank material of 2", 1.5", or 0.75" thickness depending upon location and available space.

In addition, a Norton VHB (very high bond) system shall be utilized on sidewalls and roof to provide a thermal and noise break between the outside skin and structural members.

COMPLY	YES	NO
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### 5.17X MODULE CLIMATE CONTROL SYSTEM

Two (2) Coleman Duo Therm Penguin low profile roof units with 11,000 BTU cooling capacity and 5,500 BTU heating capacity.

Unit shall have controls mounted in the ceiling, and run off the generator. (Section 6.21 related)

COMPLY YES NO
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### 5.23X WHITE MARKER BOARD

Painted white steel white marker boards shall be installed one (1) aft section of cabinet #8 work area wall, one (1) the back wall of workstation cabinet #19, and one (1) framed board on the front wall of module wall.

The white marker board on the front wall shall be removable.

COMPLY YES NO
---------------

### 5.24A CLOCK

An Atomic controlled clock shall be installed on the face of the electrical cabinet. The clock shall be LCD display and show hours (12/24 selectable), minutes seconds, date, day, and temperature. Clock shall be powered by one (1) "AA" alkaline battery.

COMPLY	YES	NO

### 5.25X ANCHOR POINTS

Eight (8) Buyers #B801 heavy duty recessed tie Down Rings shall be installed; Six (6) shall be installed on the diamond plate floor of compartment #5, three (3) on each side, fore and aft. Two (2) shall be installed one (1) on the floor just outside of compartment #5 and one (1) on the back wall of cabinet #14.

Tie downs shall be anchored on 0.375" plate.

COMPLY	YES	NO

### 5.28X REFRIGERATOR

A Kenmore 4.6 cu. ft. refrigerator shall be installed. There shall be vents to provide adequate air flow to the cooling coils. It shall be wired to be on when shoreline is plugged in or on with generator. Refrigerator shall be installed with a drip pan, and drain to the exterior of the module. A latch shall hold door closed while the vehicle is in motion.

## 5.31X FIRE EXTINGUISHER

Two (2) ABC 20 lb. Fire Extinguishers with vehicle mounts shall be provided. One (1) mounted in the cab behind the driver's seat, and one (1) aisle side of the right front stack with an "L" bracket and strap to hold bottle in place.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 5.40X MISCELLANEOUS EQUIPMENT

One (1) battery operated smoke detector shall be installed aft of Cabinet #16. One (1) battery operated Carbon Monoxide detector shall be installed near the floor aisle side of the right front stack, behind the Streamlight.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 5.50X MISCELLANEOUS BRACKETS

A painted aluminum bracket and strap shall be installed on the action area counter top in cabinet #8 to hold a *customer supplied and installed* Logos. A painted aluminum bracket and strap shall be bolted below cabinet #3 to hold a *customer supplied and installed* light table. Logos and light table shall have dedicated 110V outlets. (Section 6.21X related)

# 6 ELECTRICAL

All added body and chassis electrical equipment shall be served by circuits separate and distinct from the vehicle chassis circuits. All vehicle wiring shall be copper and conform to all SAE J1128 requirements. The wiring shall be colored, numbered, and function coded every 3" for permanent identification and correspond with the vehicle schematics. Solderless, insulated connectors shall be used. Wiring panduit shall be used in power component module to ensure air circulation throughout power component wiring. The wiring shall be routed in conduit or looms and wiring shall be secured to the underbody or frame with insulated metal cable straps. All power distribution cabling shall be covered with a protective split loom. Where wiring passes over the exhaust, a heat shield shall be installed. Wiring and electrical components shall not be placed under or behind the cab seats. The power component module shall be equipped with positive locking plugs to provide easy disconnect for remount or repair of body. All wiring devices, switches, outlets, etc., except circuit breakers, shall be rated to carry 125% of the maximum ampere load for which the circuit is protected.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.01 OVERLOAD PROTECTION DEVICES

Body electrical wiring shall utilize overload protective devices of the automatic reset, circuit breaker type. In addition, one (1) single pole, 20-amp circuit breaker shall be provided for future use. The circuit breakers, relays, and other electrical items shall be located in the enclosed power component module.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.02 VOLTMETER

Shall be an OEM component installed in dash. The scale shall be from 8 to 18 V.D.C. (Section 1.01.08 related)

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.05X MODULE POWER

A 200-amp power disconnect switch (CDR-357) shall provide module power. An ignition interlock will disconnect module power fifteen (15) minutes after vehicle's ignition is turned off. The interlock will also allow module power to be activated independently for fifteen (15) minutes without engaging ignition. CDR-357 shall be interlocked to generator. Module power shall run continuous when the shoreline is plugged in.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.06 WIRING ACCESS

All cabinets at ceiling level shall have removable backs, which are screwed in place for access to harnesses. Stack cabinets shall have removable panels for wiring and hose access.

COMPLY YES NO

# 6.07 BACK-UP ALARM

Shall be OEM installed.

COMPLY YES NO
---------------

#### 6.08 SERVICE LOOP

A 6" service loop of wire or harness shall be provided at all electrical components, terminals, and connection points.

COMPLY YES\_\_\_ NO\_\_\_

## 6.09X DRIVER'S CONSOLE/MAP BOX

Installed between the seats and made of formed aluminum, with black powder coating. It shall have a switch panel with the following layout and a map holder with adjustable dividers. This panel shall include the following:

#### **SWITCHES**

- 1. Module Disconnect
- 2. Left Scene
- 3. Right Scene
- 4. Rear Scene
- 5. Ground lights
- 6. Spare

### **OTHER:**

Unitrol Touchmaster siren Customer supplied Motorola Astro 800Mh

Remote start for generator

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.10 SWITCHES

Shall be lighted rocker type and permanently marked by function. One (1) spare switch shall be provided.

COMPLY YES\_\_\_\_ NO\_\_\_\_

### 6.11X MAP LIGHT

A Sunnex map light, Model #HS741-20, with switch on panel shall be mounted, on a bracket, in the curbside front corner of the driver's console.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.12X DOOR AJAR WARNING LIGHT

A Code 3 red LED beacon on the cab headliner to warn the driver of open exterior compartment and passage doors, and when the RF antenna pole is in the up position. Wire to parking brake.

#### 6.13X WORK STATION PANEL

Shall be located over the work area. Panel shall include switches, as follows:

1. Fluorescents 2. Red Fluorescents

3. White Fluorescents

A generator On/Off switch shall be located adjacent to the work station control panel.

COMPLY	YES	NO

### 6.14X ACTION AREA LIGHTING

Shall be provided by a three (3) Thin-Lite Model #612 light with 12VDC dual 11" fluorescent bulbs in the streetside work area and one (1) 36" light above the curbside work station. Each light shall be individually switched at the light head.

#### 6.15 STEPLIGHTS

The side access doorstep well shall have a light installed. Light shall automatically activate when the curbside passage door is opened.

#### 6.16X MODULE INTERIOR LIGHTING

Shall be designed to keep vehicle height to a minimum without interfering with the structural integrity of the roof. Module interior lighting shall consist of seven (7) fluorescent lights. Five (5) shall be installed along the centerline of the module, and two (2) centered over the robot area. The forward most light shall be connected to the curbside passage door and automatically activate when the door is open.

COMPLY YES NO
---------------

#### 6.17X BASIC EXTERIOR LIGHTING

Shall include headlights, parking lights, directional signal lights, tail and stop lights, license plate light, back-up lights, side marker lights, hazard and warning lights, and clearance lights as required by FMVSS 108. Rear, stop and turn lights shall be LED. Side marker and back-up lights shall be "Truck-Lite" sealed units. Red and Amber module clearance lights shall be "Truck-Lite" LED Model 18 sealed lights.

COMPLY YES NO	COMPLY	YES	NO
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### 6.18X COMMUNICATION EQUIPMENT

The customer shall be responsible for powering up and tuning of the radio equipment.

Item #1: Description: Install one (1) Customer Supplied one piece Radio and

speaker

Location: Radio to be recess mounted in the driver's console, with

a speaker installed off the front of the console.

Item #2: Description: Three (3) Sigtronic headsets, and three (3) Ports

Location: Two (2) headsets and two (2) ports Cabinet #8, one (1)

port and one (1) headset Cabinet #19

COMPLY	YES	NO	

The following communication combination requested:

#### Cabinet #8

## 1. Remotec Monitor

Remotec Robot to Remotec Monitor

Remotec Robot to DVDR

## 2. Intec Cameras (2)

Intec to DVDR

**DVDR** Recorder

Intec Camera through DVDR to three (3) TV monitors

Remotec Camera to three (3) TV monitors and Remotec monitor

## 3. <u>Docking Station / Laptop Panasonic Toughbook 19</u>

Connected to TV #2

## 4. Ramp Camera

Connected to TV #1

## 5. TV #2

Connected to DVDR

Connected to all TV's with 3-way switching

Connected to Laptop Docking Station

### 6. TV #3

Connected to DVDR

Connected to TV #2 with 2-way switching

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.19X ANTENNA MOUNTS AND CABLES

Three (3) NMO universal antenna mounts with KHFUD cables and Larsen HyPer master universal connectors and mini-UHF adapters shall be installed on the module. Antenna base access shall be through the dome light openings, and the cables shall terminate two (2) to the docking station in the streetside workstation Cabinet #8, and one (1) shall be routed to the cab radio.

#### 6.21X 110 VAC/SHORELINE CIRCUIT BOX

Utility power shall be furnished with 110 VAC shorepower via one (1) Kussmaul Super Auto eject 30-amp receptacle located on driver's side of vehicle and distributed through a recessed Load Center power box, flush mounted on the forward wall of the streetside action area, so as to maximize space. The Load Center shall be wired with an input cord for a generator hookup. All 110V outlets shall be GFI protected. A transfer switch shall be furnished and wired between generator and shoreline. This will provide power to selected 110VAC items from either electrical source.

The load center shall have breakers to isolate as follows:

1. Battery Charger

5. Interior Recept Curbside (GFI)

2. Interior Recept Streetside (GFI)

6. Exterior Pole Light (GFI)

3. Exterior Pole Light (GFI)

7. Air Conditioner

4. Rooftop Heat Pump

8. Blank

Twenty-eight (28) 110 VAC duplex grounded outlets shall be mounted: one (1) on the ceiling of compartment #7, two (2) in cabinet #1, one (1) in cabinet #2, one (1) on the closeout in cabinet #3, three (3) in a power strip inside cabinet #4, one (1) in cabinet #5, two (2) in cabinet #6 on the back wall, one (1) in cabinet #7 for the refrigerator, six (6) in a power strip along the back wall of cabinet #8 streetside action area, one (1) mounted on the wall behind the workstation area cabinet #8, two (2) along the back wall of cabinet #15 accessible from the exterior thru the Robot doors, one (1) in cabinet #16, one (1) in cabinet #17, four (4) in a power strip in cabinet #19 curbside workstation, and one (1) in cabinet #23.

Four (4) weatherproof 110VAC duplex-grounded outlets shall be mounted, two (2) on the rear of the module for pole lights, one (1) on the streetside of module, and one (1) on the curbside of the module.

The aft most outlet in the streetside workstation cabinet #8 power strip shall be controlled by an On/Off switch on the power strip labeled "LOGOS". The outlet on the back wall of the streetside work station cabinet #8 shall be controlled by an On/Off switch on the power strip labeled "LIGHT TABLE".

COMPLY YES\_\_\_ NO\_\_\_

#### 6.22 BATTERY GROUNDS

In addition to OEM grounds, the following ground circuits shall be added: 4 ga. ground cable from module power component panel to frame, two (2) braided ground straps from the module body to the chassis to reduce RF interference.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.23X BATTERY CHARGER

An 80-amp minimum battery charger/conditioner shall be provided and wired to shoreline. The charger shall have totally filtered output voltage, locked at a maximum 14 volts. The charger shall be designed for long term charger and converter operation without damage to batteries. It shall be installed in electrical cabinet #22.

#### 6.25X 12 VOLT RECEPTACLES

Seven (7) 12 volt, 20 amp cigar type receptacles shall be provided; three (3) in the power strip on the streetside workstation, one (1) in cabinet #5, two (2) on the curbside workstation, and one (1) on the back wall of cabinet #25. Receptacles shall be powered continuously.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.26X COMPARTMENT LIGHTING

A 3" dome light shall be installed in all outside compartments and shall be activated by a door switch. Compartment #2 (generator compartment) shall not have a compartment light. One (1) Whelen #70K00ZR scenelight with flange shall be installed on the ceiling in the interior of Compartment #7. Change light bulb to a 27 watt bulb. Light shall be connected to door open switch.

COMPLY YES\_\_\_\_ NO\_\_\_

### 6.27 EXTERIOR DOOR SWITCHES

Shall be 1/2" door switches. All door switch terminals shall have Heatshrink installed.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.30X EMERGENCY WARNING SYSTEMS

All emergency lights shall meet California Title 13 standards and California Vehicle Code requirements.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.30.01X FRONT LIGHTBAR

Shall be a 100" Whelen #4500 Plus Lightbar.

Pattern from curbside to streetside as follows: Blue lens Blue Super LED, Red lens Red Super LED, Blue lens Blue Super LED, Red lens LED Steady Red, 795 Opticom, Red lens LED Steady Red, Blue lens Blue Super LED, Red lens Red Super LED, Blue lens Blue Super LED.

The light bar shall be recess mounted with horizontal plane of the roof, and protrude no more than 1/2" beyond the vertical plane of the front and sides of the module. The clearance lights shall be an integral part of the light bar.

COMPLY YES\_\_\_ NO\_\_\_

#### 6.30.03X FLASHERS

Four (4) Whelen #70B02SBR Blue lens Blue Super LED flashers shall be installed: one (1) on each side in the upper forward corners, and two (2) on the rear of the module at mid height.

Four (4) Whelen #70R02SRR Red lens Red Super LED flashers shall be installed: one (1) on each side in the upper rear corners, and two (2) on the rear of the module in the upper corners.

## 6.30.04X SCENELIGHTS

Eight (8) Whelen #70K000ZR Scene lights parabolic scenelights shall be installed - three (3) on each side, and two (2) on the rear. The scenelights shall be flush mounted and have internal optics to deflect the light down at 8-32 degree angles.

The rear scenelights shall also activate when the vehicle is placed in "Reverse".

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.30.06X INTERSECTION LIGHTS

Four (4) Intersection lights shall be installed, one (1) on each fender and one (1) above each wheel well. These shall be Whelen #70BR6FCR Red/Blue split Super LED flasher with 7EFLANGE.

COMPLY YES\_\_\_ NO\_\_\_

#### 6.30.07X HEADLIGHT FLASHER UNIT

Shall be a Whelen UHF2150A headlight flasher unit.

COMPLY YES\_\_\_\_ NO\_\_\_\_

### 6.30.08X GRILLE LIGHTS

Shall be one (1) Whelen #70R02SRR Red lens Red Steady streetside, and one (1) Whelen #70B02FBR Blue lens Blue Super LED flasher with 7EFLANGE.

COMPLY YES\_\_\_\_ NO\_\_\_

#### 6.30.09X SIREN

Install a Unitrol Touchmaster siren. All emergency lights shall be controlled by the siren slide bar. *Exact configuration to be determined by the customer*.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.30.10 SIREN SPEAKERS

Shall be a Whelen SA3101 "UnderPro" Under Bumper System with two (2) 100-watt speaker drivers.

COMPLY YES\_\_\_\_ NO\_\_\_\_

### 6.38X MODULE SPEAKERS

Two (2) speakers shall be installed in the module and connected for use with an under the counter mounted 12V AM/FM/CD player installed in cabinet #1.

## 6.40X ELECTRIC DOOR LOCKS/ALARM SYSTEM

Shall be installed on all compartment and module access doors except compartment #2 generator compartment. The chassis and module door locks shall be controlled remotely with Key Fob type controllers. Eight (8) remote key fobs shall be provided. Locking the doors with the electric locks will also arm the alarm system. Each passage door shall have a switch. An alarm system shall be installed covering the cab and all outside compartments and doors.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.43X GROUND LIGHTS

Four (4) ground lights shall be installed one (1) at the module passage door, one (1) below compartment #5, and one (1) below each cab door. Lights shall be controlled by an on/off switch in the driver's console.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.44X GENERATOR

An 8kw Onan diesel generator shall be installed in exterior Compartment #2. Fuel for the generator shall be supplied from the vehicle fuel supply. A generator control panel shall be mounted in the streetside work area cabinet #8, and in the driver's console.

The Generator exhaust pipe will terminate below the compartment.

COMPLY YES\_\_\_ NO\_\_\_\_

### 6.50X REAR VIEW BACKUP CAMERA/NAVIGATIONAL SYSTEM

One (1) Eclipse AVN726E navigational system shall be installed and mounted in the chassis cab. This system shall be tied to a back up camera recess mounted on the rear of the module. Monitor screen will automatically turn to the back up camera when the vehicle is placed in reverse. Eclipse unit shall be mounted in the chassis OEM dash if possible. Eclipse unit shall be wired to allow for changing the address while the vehicle is moving.

COMPLY YES\_\_\_\_ NO\_\_\_\_

## 6.55X MISCELLANEOUS EQUIPMENT

One (1) Havis Shield Kwik Raze bottom raise telescoping pole with up indicator shall be installed curbside module front. A 14" x 11" x 0.190" plate shall be installed at the top of the pole for the robot controller. Access shall be installed to run the Remotec cable from the bottom of the pole to the connector in cabinet 21. A plate with holes for Remotec antenna and associated parts shall be installed in cabinet 21.

#### 6.60X CAMERA TOWER

A Will-Burt NS 4.5 Powerlite tower with INTEC camera platform, D/C power cable, hand held remote shall be provided. Tower shall be connected to chassis OEM air tank and compressor. Handheld remote shall be installed in cabinet #21 workstation.

The camera shall be one (1) Intec VSC21211 super high performance Day/Night color camera. A twenty foot (20') cable (VSUCAM20FMS) connector between the base of master video processor is required. Camera shall be viewed off primary TV in cabinet #8, with the capability to be viewed by the rear TV. (Section 5.50X related). A Video distribution Amplifier shall take the feed from the cameras to the TV in cabinet #7. (Section 5.55X related)

A red label with white letters shall be installed on the wall of cabinet #7 stating: WARNING:

To avoid driving the camera into the roof:

- 1. Do not operate camera until mast has been raised.
- 2. Stow camera (by switching power off at the system controller) <u>before</u> lowering the mast.

COMPLY YES NO
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# 6.70X EXTERIOR/INTERIOR AUDIO/VISUAL EQUIPMENT

Two (2) 20" LCD thin profile color televisions shall be provided and installed on the wall of the streetside workstation cabinet #8. One (1) TV shall be mounted on a swivel base and one (1) wall mounted over the forward seating position. The stationary TV shall be connected to the Robot. The swivel mounted TV shall be connected to the DVDR and the security camera mounted above cabinet #5.

A security camera shall be installed above interior cabinet #5 for guiding the robot into the module.

One (1) Sony Bravia 32" flat screen TV shall be installed on cabinet #3. This TV shall be wired to the Laptop in cabinet #8 displaying images from the x-ray machine, and the cable TV connection. (Section 6.80X related)

A 20" flat screen TV shall be installed in the curbside exterior compartment #7 connected to the Robot camera and cable TV connection.

One (1) DVDR recorder/player combination unit shall be installed in cabinet #1, and record off the Robot TV.

A distribution amplifier shall be installed in cabinet #1 to boost the robot camera signal. A Coax RF connector on the exterior streetside shall be wired to 32" TV in cabinet #3, and the TV in exterior compartment #7.

COMPLY	YES	NO

## 6.75X MISCELLANEOUS LIGHTING

Two (2) Streamlite, flood light "Lightbox" shall be provided and installed on the aisle side of the right front stack, above the fire extinguisher.

COMPLY	YES	NO

# 6.80X MISCELLANEOUS ROBOT CONTROL EQUIPMENT

Remotec control panels, cables, and jacks shall be provided and installed.

Remotec connection points and volume controls shall be mounted on the wall above the action area cabinet #8. The Video / Vehicle / and Tool control panel shall be installed on the action area countertop. (Section 2.10X related) Two (2) cables shall run from the panel on the action area wall; one (1) to cabinet #15, connection point to be mounted on the upper closeout, and one (1) to the front curbside interior of the cabinet #23 for connecting to the portable exterior antenna base.

TV and DVDR combo to be hooked up to this system per Remotec's direction. (Section 6.70X related)

COMPLY YES\_\_\_\_ NO\_\_\_\_

# 6.85X MISCELLANIOUS EXRAY EQUIPMENT

A Panasonic Toughbook 19, docking station and mounting bracket shall be installed on the countertop workstation cabinet #8.

COMPLY YES\_\_\_\_ NO\_\_\_\_

#### 6.90X EXHAUST FAN

An 110V exhaust fan shall be installed above cabinet #18 wired to a push button Leviton 6260M-W four position switch; 10 minute, 20 minute, 30 minute, and 60 minute. Switch shall be labeled "EXHAUST FAN".

# **7** SUPPORTING DOCUMENTATION

## 7.01X OWNERS MANUAL

Two (2) copies shall be provided with vehicle and consists of the following items:

- 1. Chassis owner information packet.
- 2. Extra set of keys.
- 3. Lifetime module warranty.
- 4. Factory warranty on Chassis.
- 5. 7 Year/75,000 miles limited electrical warranty.
- 6. 2 Year/30,000 mile Conversion Warranty.
- 7. 5 Year Paint Warranty.
- 8. Module remount engineering checklist.
- 9. Climate control information and warranty.
- 10. Main schematic.
- 11. Electrical equipment amperage ratings.
- 12. Wire coding list.
- 13. Schematics for standard system: (As Built)
  - Driver switch console
  - Attendant switch console
  - Climate control system
  - Dual battery system
  - Module harness routing
  - Interior and exterior lights
- 14. Operations manual
- 15. Schematics for individual options.
- 16. Warranty and parts list for light bar, etc.

COMPLY YES\_\_\_ NO\_\_\_\_

## 7.02C CHASSIS MANUFACTURER'S MANUALS

Two (2) set of Workshop Manuals shall be provided on CD with the vehicle.

COMPLY	YES	NO
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# 8 MISCELLANEOUS MEDICAL/RESCUE EQUIPMENT

# 8.01 LOOSE EQUIPMENT

The following equipment shall be shipped loose with the vehicle:

- 1. Touch Up Paint
- 2. Eight (8) sets of keys, ignition, door, exterior deadbolt, and interior deadbolts for Cabinets #13 and #24
- 3. Two (2) 34" straps with footman loops (for Cabinet #6, to hold down battery chargers)
- 4. Six (6) 1" rubber door stoppers
- 5. Male cord end for 30 Amp Auto Eject shoreline receptacle
- 6. Three (3) ratcheting tie down straps
- 7. Spare Tire and wheel

COMPLY YES\_\_\_ NO\_\_\_

## 8.02 CUSTOMER SUPPLIED EQUIPMENT

The customer shall provide the following equipment and have delivered to Manufacturer Northwest:

- 1. Radio
- 2. Department Decal